(Pages : 4) **J – 3000**

Reg. No. : .....

Name : .....

Fourth Semester B.Com. Degree Examination, June 2020

First Degree Programme Under CBCSS

Complementary Course : CO 1431/CX 1431/CC 1431/HM 1431

BUSINESS STATISTICS

(Common for Commerce / Commerce and Tax Procedure and Practice / Commerce with Computer Application / Commerce and Hotel Management and Catering)

(2018 Admission)

Time : 3 Hours Max. Marks : 80

SECTION – A

Answer **all** questions in one or two sentences each. Each question carries **1** mark.

1. Define statistics.
2. What is mean deviation?
3. What is primary data?
4. What is a histogram?
5. What is sampling?
6. What is probable error?
7. What is Regression?

8 What are index numbers?

9 What is time series?

10 What is extrapolation?

(10 × 1 = 10 Marks)

SECTION – B

Answer **any eight** questions. Each carries **2** marks.

11 What are the components of time series?

12 State the unweighted indices.

13 What is random sampling?

14 What is a scatter diagram?

15 What is false base line?

16 What is a simple and complex tables?

17 What is chronological classification?

18 What is size of sample?

19 What is Median?

20 What is multiple correlation?

21 What is judgement sampling?

22 What is harmonic mean?

(8 × 2 = 16 Marks)

SECTION – C

Answer **any six** questions. Each carries **4** marks.

23. Explain the law of statistical regularity.

24. What are the significance of tabulation?

25. Explain geometric mean and its properties.

26. If $r = 0.6$ and $n = 64$, find probable error and standard error.

27. You are given the following data :

	X	Y
Arithmetic mean	36	85
Standard deviation	11	8

Correlation coefficient between X and $Y = 0.66$.

(a) Find the two regression equations

(b) Estimate the value of X when $Y = 75$.

28. What are the requisites of a good average?

29. What is coefficient of variation?

30. Calculate coefficient of range :

Marks	No. of students
10-20	8
20-30	10
30-40	12
40-50	8
50-60	4

31. What is Laspeyres index?

(6 × 4 = 24 Marks)

SECTION – D

Answer **any two** questions. Each carries **15** marks.

32. Explain different methods for selecting samples.

33. Calculate mean and standard deviation of the following :

Marks	No. of students
0-10	5
10-20	12
20-30	30
30-40	45
40-50	50
50-60	37
60-70	21

34. Calculate coefficient of correlation from the following data :

X	100	200	300	400	500	600	700
Y	30	50	60	80	100	110	130

35. Explain the utility of Time Series analysis.

(2 × 15 = 30 Marks)

———————